

WHAT IS CLAIMED IS:

1. A sterile transfer container for containing a battery having electrical terminals for powering a surgical instrument comprising:

a tubular body having an axis, a closed distal end and an open proximal end, said distal end having a detent means for being engaged by a member;

terminal means extending through said tubular body for electrically communicating with the battery terminals of a battery retained within said body;

a cover for releasably enclosing said open proximal end; and

locking means for locking said cover to said body, said locking means comprising:

an elongated member extending exteriorly of said body between said distal and proximal ends of said body, in general parallel alignment with said axis, said elongated member having a proximal end and a distal end;

a latching means affixed to said distal end of said elongated member, said latching means for selectively engaging said detent means on said distal end of said body;

a lateral support member for selective locking engagement with said cover, said lateral support member secured transversely to said proximal end of said elongated member; and

releasable closing bias means for urging said latching means against said detent means and said lateral support member against said cover when said cover is locked, said closing bias means interposed between said elongated member and said cover.

2. A sterile transfer container according to claim 1 wherein said tubular body has a peripheral wall wherein said detent means is adjacent said peripheral wall and said detent means comprises at least one longitudinally extending shoulder situated on said distal end of said tubular body adjacent the periphery of said distal end; and

wherein said latching means comprises a member affixed to said distal end of said elongated member and laterally extending therefrom toward said axis.

3. A sterile transfer container according to claim 1 wherein said lateral support member is resilient and wherein said releasable closing bias means comprises:

a predetermined bend in said lateral support member causing said latching means to move proximally away from said detent means when said locking means is not biased, said bend thereby creating, when said latching member is in engagement with said detent, a compressive force between said body and said cover.

4. A sterile transfer container according to claim 2 wherein said lateral support member is resilient and wherein said releasable closing bias means comprises:

a fulcrum means extending proximally from said cover for deforming said lateral support member when said cover is locked.

5. A sterile transfer container according to claim 1 wherein said lateral support member is attached to said body at a point diametrically opposite said elongated member.

6. A sterile transfer container according to claim 1 wherein said cover is hingedly joined to said tubular body at a point diametrically opposed from said elongated member and wherein said lateral support member is hingedly joined at said point.

7. A sterile transfer container according to claim 5 wherein said lateral support member is hingedly movable about said point independently of said cover.

8. A sterile transfer container according to claim 1 further comprising:

instrument attachment means adjacent said terminal means for attaching said tubular body to an instrument to be powered by a battery within said tubular body; and

movable latch means for securing attachment of said tubular body to said instrument.

9. A sterile transfer container according to claim 8 in combination with a surgical instrument comprising receiving means for mateable engagement with said instrument attaching means wherein said detent means and said latching means are adapted to be blocked, when said cover is locked and when said instrument is attached to said instrument attaching means, to prevent disengagement of said latching means from said detent means until said latch means is released.

10. In combination a sterile transfer container for retaining a battery therein and a surgical instrument for being

powered by the battery, said sterile transfer container comprising:

a tubular body having an axis, a closed distal end and an open proximal end, said distal end having a detent means for being engaged by a member;

terminal means extending through said tubular body for electrically communicating with the battery terminals of a battery retained within said body;

instrument attaching means adjacent said terminal means for attaching said tubular body to said instrument;

a cover for releasably enclosing said open proximal end; and

locking means for locking said cover to said body, said locking means comprising:

an elongated member extending exteriorly of said body between said distal and proximal ends of said body, in general parallel alignment with said axis, said elongated member having a proximal end and a distal end;

a latching means affixed to said distal end of said elongated member, said latching means for selectively engaging said detent means on said distal end of said body;

a lateral support member for selective locking engagement with said cover, said lateral support member secured transversely to said proximal end of said elongated member;

releasable closing bias means for urging said latching means against said detent means and said lateral support member against said cover when said cover is locked, said closing bias means interposed between said elongated member and said cover;

and said surgical instrument comprising:

receiving means for mateable engagement with said instrument attaching means; and

blocking means for preventing disengagement of said latching means from said detent means when said sterile transfer container is attached to said instrument.

11. The combination according to claim 10 further comprising movable latch means for securing attachment of said tubular body to said instrument and wherein said blocking means comprises a predetermined portion of said instrument which prevents disengagement of said latching means from said detent means until said latch means is released and said tubular body is detached from said instrument.

12. A method for securing a sterile transfer container, holding a battery, to a surgical instrument comprising the steps of:

providing a sterile transfer container comprising:

a tubular body having an axis, a closed distal end and an open proximal end, said distal end having a detent means for being engaged by a member;

terminal means extending through said tubular body for electrically communicating with the battery terminals of a battery retained within said body;

instrument attaching means adjacent said terminal means for attaching said tubular body to said instrument;

movable latch means for securing attachment of said tubular body to said instrument;

a cover for releasably enclosing said open proximal end; and

locking means for locking said cover to said body, said locking means comprising:

an elongated member extending exteriorly of said body between said distal and proximal ends of said body, in general parallel alignment with said axis, said elongated member having a proximal end and a distal end;

a latching means affixed to said distal end of said elongated member, said latching means for selectively engaging said detent means on said distal end of said body;

a lateral support member for selective locking engagement with said cover, said lateral support member secured transversely to said proximal end of said elongated member;

releasable closing bias means for urging said latching means against said detent means and said lateral support member against said cover when said cover is locked, said closing bias means interposed between said elongated member and said cover;

providing on said instrument a receiving means for mateably engaging said attaching means;

attaching said receiving means to said attaching means; and

blocking said latching member with a predetermined portion of said instrument to prevent said latching means from becoming disengaged from said detent means while said container is attached to said instrument.

13. A method according to claim 12 wherein said instrument comprises a pistol-grip handle adjacent said receiving means, and wherein said blocking step is accomplished by a predetermined portion of said handle.

14. A sterile transfer container for containing a battery having electrical terminals for powering a surgical instrument comprising:

a hollow body having a closed distal end and an open proximal end;

terminal means extending through said body for electrically communicating with the battery terminals of a battery retained within said body;

a cover for releasably enclosing said open proximal end;

latch means for selectively latching said cover to said body; and

lock means for securing said latch means to selectively prevent its release.

15. A sterile transfer container according to claim 14 wherein said cover is hingedly joined to said body at a point diametrically opposed from said latch means.

16. A sterile transfer container according to claim 14 wherein said latch means comprises:

a fixed detent means on said body; and

a movable latching member attached to said cover and for selectively engaging said fixed detent means.

17. A sterile transfer container according to claim 13 wherein said latch means comprises:

a fixed detent means on said cover; and

a movable latching member attached to said body and for selectively engaging said fixed detent means.

18. A sterile transfer container according to claim 14 further comprising:

instrument attachment means adjacent said terminal means for attaching said body to an instrument to be powered by a battery within said body; and

movable latch means for securing attachment of said body to said instrument.

19. A sterile transfer container according to claim 18 in combination with a surgical instrument comprising receiving means for mateable engagement with said instrument attaching means wherein said detent means and said latching

means are adapted to be blocked, when said cover is locked and when said instrument is attached to said instrument attaching means, to prevent disengagement of said latching means from said detent means until said latch means is released.

20. In combination a sterile transfer container for retaining a battery therein and a surgical instrument for being powered by the battery, said sterile transfer container comprising:

a hollow body having a closed distal end and an open proximal end;

terminal means extending through said body for electrically communicating with the battery terminals of a battery retained within said body;

a cover for releasably enclosing said open proximal end;

latch means for selectively latching said cover to said body; and

lock means for securing said latch means to selectively prevent its release;

and said surgical instrument comprising:

receiving means for mateable engagement with said instrument attaching means;

blocking means for preventing release of said
lock means when said sterile transfer container is attached to
said instrument.

21. A method for securing a sterile transfer
container, holding a battery, to a surgical instrument
comprising the steps of:

providing a sterile transfer container
comprising:

a body having a closed distal end and an open
proximal end;

terminal means extending through said body for
electrically communicating with the battery terminals of a
battery retained within said body;

a cover for releasably enclosing said open
proximal end;

latch means for selectively latching said cover
to said body; and

lock means for securing said latch means to
selectively prevent its release;

providing on said instrument a receiving means
for mateably engaging said attaching means;

attaching said receiving means to said attaching
means;

blocking said latch means to prevent said latch means from becoming released while said container is attached to said instrument.

22. A method according to claim 21 wherein said blocking step is effected by contiguous engagement of said latch means with a predetermined portion of said instrument.

23. A method according to claim 21 wherein said instrument comprises a pistol-grip handle adjacent said receiving means, and wherein said blocking step is accomplished by a predetermined portion of said handle.

24. In combination a sterile transfer container and a surgical instrument, said sterile transfer container adapted to receive a battery therein and adapted to be attached to said surgical instrument for powering said surgical instrument, said sterile transfer container and said surgical instrument each comprising respective, mateable engagement means for releasably attaching said sterile transfer container to said surgical instrument, said sterile transfer container comprising:

a hollow body for containing a battery, said body having an opening through which a battery may be inserted;

a cover for hermetically enclosing said battery within said body by selectively covering said opening;

latch means for selectively latching said cover to said body;

lock means for securing said latch means to prevent its release when said body is attached to said surgical instrument;

and said surgical instrument comprising:

blocking means for preventing release of said lock means when said sterile transfer container is attached to said instrument.

25. The combination of claim 24 wherein said latch means comprises a releasable latching member interposed between said cover and said body and wherein said lock means comprises a latching member and detent means which are directly engaged by said surgical instrument to prevent motion thereof when said sterile transfer container and said instrument are attached to each other.

26. The combination of claim 24 wherein said latch means comprises a releasable latching member interposed between said cover and said body, and wherein said lock means comprises a securing means interposed between said latching member and

said surgical instrument, said securing means having a proximal end attached to said releasable latching member and a distal end adapted to be selectively abutted against said surgical instrument when said sterile transfer container and said instrument are attached to each other, said abutment comprising indirect engagement of said surgical instrument with said latching member to prevent motion thereof when said sterile transfer container and said instrument are attached to each other.